

REMARKS/ARGUMENTS

Claims 1 – 8 are presented for reconsideration and further examination in view of the foregoing amendments and following remarks.

In the outstanding Office Action, claim 8 has been withdrawn from consideration; the Examiner rejected claims 1- 7 on the judicially created doctrine of nonstatutory double patenting as being unpatentable over claims 1 - 9 of U.S. Patent No. 6,811,866 to Kinoshita et al.; rejected claims 1- 7 on the judicially created doctrine of nonstatutory double patenting as being unpatentable over claims 1 - 4 of U.S. Patent No. 6,632,515 to Matsuura; rejected claims 1 – 4, 6, and 7 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,025,286 to Kawatsu et al.; and rejected claim 5 under 35 U.S.C. §103(a) as being unpatentable over Kawatsu et al.

By this Response, the rejections have been traversed.

Double Patenting Rejections

The Examiner rejected claims 1- 7 on the judicially created doctrine of nonstatutory double patenting as being unpatentable over claims 1 - 9 of Kinoshita et al.; and rejected claims 1- 7 on the judicially created doctrine of nonstatutory double patenting as being unpatentable over claims 1 - 4 Matsuura.

Response

A double patenting rejection of the obviousness-type is "analogous to [a failure to meet] the nonobviousness requirement of 35 U.S.C. 103" except that the patent principally underlying the double patenting rejection is not considered prior art. *In re Braithwaite*, 379 F.2d 594, 154 USPQ 29 (CCPA 1967). Therefore, any analysis employed in an obviousness-type double patenting rejection

parallels the guidelines for analysis of a 35 U.S.C. 103 obviousness determination. *In re Braat*, 937 F.2d 589, 19 USPQ2d 1289 (Fed. Cir. 1991); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). *See* MPEP 804 II.B.1.

Applicants respectfully traverse the rejections because the Examiner has failed to provide an analysis that parallels the guidelines for analysis of a 35 U.S.C. 103 obviousness determination.

In other words, the differences between the conflicting claims have not been discussed and no motivation for modifying the patents has been given.

Accordingly, Applicants respectfully request withdrawal of the rejection, or in the alternative, request that the Examiner hold the rejection in abeyance until the pending claims in this application are found to be allowable.

Rejection Under 35 U.S.C. §102(b)

The Examiner rejected claims 1 - 4, 6, and 7 as being anticipated by Kawatsu et al.

Response

Reconsideration and withdrawal of the rejection is respectfully requested.

For a reference to anticipate an invention, all of the elements of the claimed invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicants submit that Kawatsu et al. fail to disclose each and every element of the claims.

The stencil printing master according to the present invention has a unique structure that is essentially different from the prior art and is made up in a manner different from the prior art. Care must be taken here that the stencil printing master means those features at the stage before plate making.

Stencil printing masters of the prior art comprise a thermoplastic resin film and a porous support as shown in Kinoshita et al. and Kawatsu et al. Plate making of these conventional masters is conducted by thermally melting and perforating the thermoplastic resin film in order to form areas (image areas) where the printing ink can pass through.

In contrast, the stencil printing master of the present invention comprises a porous resin layer and a porous support (porous fiber layer). Namely, the layer of the present invention that corresponds to the thermoplastic resin film of the prior art already comprises pores through which the printing ink passes. In the present invention, the thermoplastic resin enables pores to be blocked by thermal melting. That is, the porous resin layer can contain a non-thermoplastic resin in an amount such that thermal melting and ink penetration will not be hindered. The plate making of the master of the present invention is therefore conducted by blocking the existing pores of the porous resin layer in order to form areas (non-image areas) where the ink does not pass through. *See* Specification at page 7, lines 13 - 18.

In the present invention, the porous resin layer contains a thermoplastic resin having a ratio ($G1/G2$) of a storage modulus ($G1$) at 45°C to a storage modulus ($G2$) at 180°C of 1×10^2 to 1×10^4 , and a peak melting temperature by DSC of 50°C to 150°C. This thermoplastic resin is preferably the main component among the resins contained, that is, it has the greatest content

(weight) among the constituent resins. Furthermore, the content of this thermoplastic resin is preferably at least 70 wt % of the total resin content, more preferably at least 80 wt %, and yet more preferably at least 90 wt %. Moreover, the solids content of thermoplastic resin is preferably at least 60 wt % of the porous resin layer, more preferably at least 70 wt %, and yet more preferably at least 80 wt %. *See* Specification at page 7, line 19 to page 8, line 4.

The thermoplastic resin has a melting point of 50°C to 150°C. When the melting point is 50°C or higher, undesirable adhesion of the masters can be prevented. On the other hand, if the melting point exceeds 150°, when a thermal head is used for platemaking by thermal melting, it is necessary to increase the energy input to the thermal head in order to increase the temperature of the heat generated by the thermal head, and this might affect the durability of the thermal head in some cases. The melting point referred to here is the peak melting temperature by DSC. *See* Specification at page 8, lines 5 - 16.

As the thermoplastic resin having the above-mentioned melting point and storage modulus characteristics, one or more types chosen from ionomers such as an ethylene-methacrylic acid copolymer (e.g., an ethylene ionomer) and olefin resins can be used. *See* for example, claim 2 of the present invention.

Claim 1 of the present invention recites a combination of elements, *inter alia*, "...a porous resin layer..., the porous resin layer comprising a thermoplastic resin having a ratio (G1/G2) of a storage modulus (G1) at 45°C to a storage modulus (G2) at 180°C of 1×10^2 to 1×10^4 , and a peak melting temperature by DSC of 50°C to 150°C." (*emphasis added*).

Kawatsu et al. discloses a heat-sensitive stencil sheet comprising a laminate of a porous support of polyester fibers, and a polyester film.

Nowhere do Kawatsu et al. mention the storage modulus of the polyester film. However, the melting point of the polyester film is preferably 230°C for good thermal perforability. *See* column 3, lines 53 - 56. In column 4, lines 56 - 65, Kawatsu et al. list the polyesters that are preferably used for the polyester film. Most of the polyesters are ethylene copolymers. Kawatsu et al. uses co-stretching to bond the polyester film and the fibrous support at a stretching temperature of 50°C to 150°C. (*emphasis added*).

In contrast, in independent claim 1 of the present invention, the storage modulus and melting point are specific features of the resin that Examiner failed to point out where they can be found in the reference, and merely stated that these features are a newly discovered function or property, inherently possessed by the prior art.

The thermal properties, physical properties, platemaking properties, and printing performance of the masters of the resins used in Examples and Comparative Examples are described in the instant application. Applicants submit that these resins are different from the polyester film in Kawatsu et al. and therefore, the property and function of the resins are different.

Applicants rebut the Examiner's finding with the evidence in the Specification of this application that the storage modulus and the melting point of the claimed resin is indeed different from the polyester resin in Kawatsu et al. because a difference in the storage modulus and melting point necessarily results in a difference in pore blockage, solid printed area uniformity, and reproduction of small characters. *See* page 36, lines 1 - 3 of the Specification.

As explained, the principle structure of the master of the cited reference and that of the present invention is fundamentally different. It follows that the mechanism of their plate making is just the opposite in view of either making pores (prior art) or blocking pores (present invention).

Accordingly, the Kawatsu et al. reference does not disclose teach or suggest each and every limitation (or any features) of the presently pending independent claim.

Moreover, as claims 2 - 4, 6, and 7 depend from claim 1, these claims are believed to be allowable at least for similar reasons.

Therefore, Applicants respectfully request that the rejection under 35 U.S.C. § 102(b) be withdrawn.

Rejection Under 35 U.S.C. §103(a)

The Examiner rejected claim 5 as being unpatentable over Kawatsu et al.

Response

To establish a *prima facie* case of obviousness, the Examiner must establish: (1) some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) the prior art references teach or suggest all of the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The rejection is respectfully traversed since all of the features of independent claim 1 are not disclosed, taught or suggested in Kawatsu et al.

Claim 5 which defines pore size and pore proportion is also not obvious in view of Kawatsu et al. because the pores in claim 5 have particular technical meaning that is not known and is unexpected. Kawatsu et al. further gives no motivation to adjust the pore size, because its thermoplastic resin film primarily has no pores in it.

Applicants further respectfully submit that the claimed storage modulus ratio and peak

melting temperature range in claim 1 and the pore size and proportion in claim 5 yield unexpected results. See *In re Waymouth*, 499 F.2d 1273, 1276, 182 USPQ 290, 293 (CCPA 1974), where the court held that unexpected results for a claimed range as compared with the range disclosed in the prior art had been shown by a demonstration of "a marked improvement, over the results achieved under other ratios, as to be classified as a difference in kind, rather than one of degree." Compare *In re Wagner*, 371 F.2d 877, 884, 152 USPQ 552, 560 (CCPA 1967) (differences in properties cannot be disregarded on the ground they are differences in degree rather than in kind); *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) ("we generally consider a discussion of results in terms of 'differences in degree' as compared to 'differences in kind' . . . to have very little meaning in a relevant legal sense").

Applicants submit that the polyester film in Kawatsu et al. does not possess the properties of the thermoplastic resin as recited in claim 1 of the present invention. Further, since claim 5 depends from claim 1, it is believed to be allowable for at least similar reasons. Presence of a property not possessed by the prior art is evidence of nonobviousness. *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (rejection of claims to compound structurally similar to the prior art compound was reversed because claimed compound unexpectedly possessed anti-inflammatory properties not possessed by the prior art compound); *Ex parte Thumm*, 132 USPQ 66 (Bd. App. 1961) (Appellant showed that the claimed range of ethylene diamine was effective for the purpose of producing " 'regenerated cellulose consisting substantially entirely of skin' " whereas the prior art warned "this compound has 'practically no effect.' "). The submission of evidence that a new product possesses unexpected properties does not necessarily require a conclusion that the claimed invention is nonobvious. *In re Payne*, 606 F.2d 303, 203 USPQ 245 (CCPA 1979).

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Accordingly, for at least the above stated reasons, Applicants respectfully request that the Examiner reconsider and withdraw the outstanding rejection under 35 U.S.C. § 103(a).

CONCLUSION

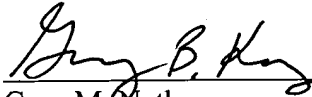
In light of the foregoing, Applicants submit that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,
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